REMARKS

In response to the Office Action of September 20, 2011, claims 37, 40 and 41 have

been amended. Claims 37-47 are pending in the application.

In paragraph 4 on page 6 of the Office Action, claims 37-41 were rejected under 35

U.S.C. § 103(a) as being unpatentable over Smyth in view of Terreault and Jahn, and in

further view of Rodriguez.

In paragraph 5 on page 12 of the Office Action, claims 42-47 were rejected under 35

U.S.C. § 103(a) as being unpatentable over Smyth in view of Terreault, Jahn and Rodriguez,

and in further view of Pandya.

Applicant respectfully traverses the rejection, but in the interest of expediting

prosecution has amended claims 37, 40 and 41.

Independent claim 37 sets forth providing a head-end for delivering programming

guide and contents to remote set top terminals coupled to display devices for viewing the

programming guide and contents, providing a service manager at the head-end for

monitoring parameters associated with transport streams for delivering the programming

guide and contents to the remote set top terminals, providing, at the head-end separately from

the service manager, a session manager for communicating with the set top terminals to

control sessions with the set top terminals and manage usage and demands of the set top

terminals, providing a monitoring and control device remotely coupled to the head-end for

remotely monitoring and controlling the head-end by communicating with both the service

manager and the session manager to poll both the service manager and the session manager

to obtain from the service manager parameters associated with transport streams for

delivering the programming guide and contents to the remote set top terminals and to obtain

status from the session manager for usage and demands of the set top terminals demands,

collecting by the monitoring and control device an identity, a type, a capability and a

reporting level for a plurality of remote devices designated for responding to monitoring and

control messages relating to the operation of the head-end, storing, at the monitoring and

control device, the collected identity, type, format capability and reporting level for the

plurality of remote devices, processing, at the monitoring and control device, the status

received from the service manager and the status received from the session manager to

present in a graphical user interface a display of the parameters associated with transport

streams for delivering the programming guide and contents to the remote set top terminals

obtained from the service manager and a display of the status obtained from the session

manager, activating an alert using the graphical user interface to generate a monitoring and

control message relating to the operation of the head-end, analyzing the generated monitoring

and control message and the stored identity, type, format capability and reporting level for

the plurality of remote devices to identify a remote device designated to receive the generated

monitoring and control message and to determine a format capability for the generated

monitoring and control message to be provided to the identified remote device and providing

a communication server for establishing communication between the plurality of remote

devices and the monitoring and control device and for providing the generated monitoring

and control message to the identified remote device according to the determined type and

format capability.

In contrast, Smyth merely discloses a head-end that includes a session control manager, a resource manager and video server, a transport processing module, a plurality of digital video modulators (DVM) modules and a plurality of control channel modems. The devices report failures to the session control manager. The session manager may then identify field personnel to alert so that the field personnel may correct the problem.

However, Smyth fails to disclose, teach or suggest providing separately a service manager and a session manager at the head-end. Rather, Smyth discloses that the session control manger communicates with the terminals and receives reports from the head-end devices. Thus, Smyth does not mention providing separately a service manager and a session manager at the head-end.

Smyth further fails to disclose, teach or suggest providing a monitoring and control device remotely coupled to the head-end for remotely monitoring and controlling the head-end by communicating with both the service manager and the session manager. Rather, Smyth discloses a session control manager that is part of the head-end to monitor and control the system.

Smyth further fails to disclose, teach or suggest polling both the service manager and the session manager by a monitoring and control device remotely coupled to the head-end to obtain from the separate service manager parameters associated with transport streams for delivering the programming guide and contents to the remote set top terminals and to obtain status from the separate session manager for usage and demands of the set top terminals demands. Smyth discloses that reports are sent to the session control manager, but Smyth fails to suggest that a remote monitoring and control device polls separate service manger and session manager.

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Smyth also fails to disclose, teach or suggest collecting by a remotely coupled monitoring and control device an identity, a type, a capability and a reporting level for a plurality of remote devices designated for responding to monitoring and control messages relating to the operation of the head-end. Smyth discloses that a list of remote devices is maintained. However, Smyth does not mention a remotely coupled monitoring and control device collecting an identity, a type, a capability and a reporting level for a plurality of remote devices.

Smyth further fails to disclose, teach or suggest presenting in a graphical user interface a display of the parameters associated with transport streams for delivering the programming guide and contents to the remote set top terminals obtained from the service manager and a display of the status obtained from the session manager. Smyth does not even mention a graphical user interface for presenting a display of monitoring and control information.

Still further, Smyth fails to disclose, teach or suggest activating an alert using the graphical user interface to generate a monitoring and control message relating to the operation of the head-end. Smyth does not mention activating an alert using the graphical user interface.

Thus, Smyth fails to disclose, teach or suggest the invention as defined in independent claim 37.

Terreault fails to overcome the deficiencies of Smyth. Terreault merely describes a system that includes a control computer for monitoring reverse paths to detect and analyze ingress signals. A control computer generates control data indicative of the communication line corresponding to the ingress path to be monitored. The control computer generates

diagnostic sequence control data for the monitoring instrumentation also used to determine source characteristics of the ingress signal.

However, Terreault fails to disclose, teach or suggest providing separately a service manager and a session manager at the head-end. Rather, Terreault discloses sending automatic messages to personnel. Thus, Terreault does not mention providing separately a service manager and a session manager at the head-end.

Terreault further fails to disclose, teach or suggest providing a monitoring and control device remotely coupled to the head-end for remotely monitoring and controlling the head-end by communicating with both the service manager and the session manager. Rather, Terreault discloses a system for monitoring paths of a head-end, wherein the system is located at the head-end.

Terreault further fails to disclose, teach or suggest polling both the service manager and the session manager by a monitoring and control device remotely coupled to the head-end to obtain from the separate service manager parameters associated with transport streams for delivering the programming guide and contents to the remote set top terminals and to obtain status from the separate session manager for usage and demands of the set top terminals demands. Terreault fails to mention that a remote monitoring and control device polls separate service manger and session manager.

Terreault also fails to disclose, teach or suggest collecting by a remotely coupled monitoring and control device an identity, a type, a capability and a reporting level for a plurality of remote devices designated for responding to monitoring and control messages relating to the operation of the head-end. Terreault does not mention a remotely coupled

monitoring and control device collecting an identity, a type, a capability and a reporting level for a plurality of remote devices.

Terreault further fails to disclose, teach or suggest presenting in a graphical user interface a display of the parameters associated with transport streams for delivering the programming guide and contents to the remote set top terminals obtained from the service manager and a display of the status obtained from the session manager. Terreault does not even mention a graphical user interface for presenting a display of monitoring and control information.

Still further, Terreault fails to disclose, teach or suggest activating an alert using the graphical user interface to generate a monitoring and control message relating to the operation of the head-end. Terreault does not mention activating an alert using the graphical user interface.

Thus, Smyth and Terreault, alone or in combination, fail to disclose, teach or suggest the invention as defined in independent claim 37.

Jahn fails to overcome the deficiencies of Smyth and Terreault. Jahn merely describes an alarm report being generated which is then forwarded in real time, if desired, to any number of communication devices based upon, for example, a predetermined distribution list. The distribution list includes only those destination addresses associated with the reportable fault (Abstract). Jahn also states that there can be any number of distribution lists associated with any number of particular reportable faults such that only certain entities are notified for certain of the faults while others are not. Jahn also states the alarm report is then properly formatted based upon the designated type of communication device for which it is intended to be delivered. In some cases, the alarm report takes the form of an SMTP

compliant email, in other cases, it takes the form of a textual page broadcast by any number of conventional paging services, such as PageNet™. In some cases, a distribution list is used to deliver the alarm report, in other cases, the alarm report can be sent to a single site, such as a command and control console located, in for example, a central office or other such facility. In this way, those entities determined to be most likely to be able to solve a particular problem can be specifically notified of a particular problem. For example, there can be any number of distribution lists associated with any number of particular reportable faults such that only certain entities are notified for certain of the faults while others are not. Of course, according to Jahn, the communication devices can include email, paging systems, control consoles, and the like. In this way, those personnel who can most readily repair the malfunction are immediately notified such that system downtime is minimized.

However, Jahn fails to disclose, teach or suggest providing separately a service manager and a session manager at the head-end. Rather, Jahn discloses sending automatic messages to personnel. Thus, Jahn does not mention providing separately a service manager and a session manager at the head-end.

Jahn further fails to disclose, teach or suggest providing a monitoring and control device remotely coupled to the head-end for remotely monitoring and controlling the head-end by communicating with both the service manager and the session manager. Rather, Jahn discloses a system for monitoring paths of a head-end, wherein the system is located at the head-end.

Jahn further fails to disclose, teach or suggest polling both the service manager and the session manager by a monitoring and control device remotely coupled to the head-end to obtain from the separate service manager parameters associated with

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transport streams for delivering the programming guide and contents to the remote set top

terminals and to obtain status from the separate session manager for usage and demands

of the set top terminals demands. Jahn fails to mention that a remote monitoring and

control device polls separate service manger and session manager.

Jahn also fails to disclose, teach or suggest collecting by a remotely coupled

monitoring and control device an identity, a type, a capability and a reporting level for a

plurality of remote devices designated for responding to monitoring and control messages

relating to the operation of the head-end. Jahn does not mention a remotely coupled

monitoring and control device collecting an identity, a type, a capability and a reporting

level for a plurality of remote devices.

Jahn further fails to disclose, teach or suggest presenting in a graphical user

interface a display of the parameters associated with transport streams for delivering the

programming guide and contents to the remote set top terminals obtained from the

service manager and a display of the status obtained from the session manager. Jahn does

not even mention a graphical user interface for presenting a display of monitoring and

control information.

Still further, Jahn fails to disclose, teach or suggest activating an alert using the

graphical user interface to generate a monitoring and control message relating to the

operation of the head-end. Jahn does not mention activating an alert using the graphical user

interface.

Thus, Smyth, Terreault and Jahn, alone or in combination, fail to disclose, teach or

suggest the invention as defined in independent claim 37.

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Rodriquez fails to overcome the deficiencies of Smyth, Terreault and Jahn. Rodriguez merely describes delivering program guide to terminals.

However, Rodriguez fails to disclose, teach or suggest providing separately a service manager and a session manager at the head-end. Rather, Rodriguez discloses sending automatic messages to personnel. Thus, Rodriguez does not mention providing separately a service manager and a session manager at the head-end.

Rodriguez further fails to disclose, teach or suggest providing a monitoring and control device remotely coupled to the head-end for remotely monitoring and controlling the head-end by communicating with both the service manager and the session manager. Rather, Rodriguez discloses a system for monitoring paths of a head-end, wherein the system is located at the head-end.

Rodriguez further fails to disclose, teach or suggest polling both the service manager and the session manager by a monitoring and control device remotely coupled to the head-end to obtain from the separate service manager parameters associated with transport streams for delivering the programming guide and contents to the remote set top terminals and to obtain status from the separate session manager for usage and demands of the set top terminals demands. Rodriguez fails to mention that a remote monitoring and control device polls separate service manger and session manager.

Rodriguez also fails to disclose, teach or suggest collecting by a remotely coupled monitoring and control device an identity, a type, a capability and a reporting level for a plurality of remote devices designated for responding to monitoring and control messages relating to the operation of the head-end. Rodriguez does not mention a remotely

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coupled monitoring and control device collecting an identity, a type, a capability and a reporting level for a plurality of remote devices.

Rodriguez further fails to disclose, teach or suggest presenting in a graphical user interface a display of the parameters associated with transport streams for delivering the programming guide and contents to the remote set top terminals obtained from the service manager and a display of the status obtained from the session manager. Rodriguez does not even mention a graphical user interface for presenting a display of monitoring and control information.

Still further, Rodriguez fails to disclose, teach or suggest activating an alert using the graphical user interface to generate a monitoring and control message relating to the operation of the head-end. Rodriguez does not mention activating an alert using the graphical user interface.

Thus, Smyth, Terreault, Jahn and Rodriguez, alone or in combination, fail to disclose, teach or suggest the invention as defined in independent claim 37.

Pandya fails to overcome the deficiencies of Smyth, Terreault, Jahn and Rodriguez. Pandya is merely cited as monitoring status of buffers for encoding data, multiplexing transport streams and bit rates for a plurality of data being provided at the head-end.

However, Pandya fails to disclose, teach or suggest

However, Pandya fails to disclose, teach or suggest providing separately a service manager and a session manager at the head-end. Rather, Pandya discloses sending automatic messages to personnel. Thus, Pandya does not mention providing separately a service manager and a session manager at the head-end.

Pandya further fails to disclose, teach or suggest providing a monitoring and control device remotely coupled to the head-end for remotely monitoring and controlling the head-end by communicating with both the service manager and the session manager. Rather, Pandya discloses a system for monitoring paths of a head-end, wherein the system is located at the head-end.

Pandya further fails to disclose, teach or suggest polling both the service manager and the session manager by a monitoring and control device remotely coupled to the head-end to obtain from the separate service manager parameters associated with transport streams for delivering the programming guide and contents to the remote set top terminals and to obtain status from the separate session manager for usage and demands of the set top terminals demands. Pandya fails to mention that a remote monitoring and control device polls separate service manger and session manager.

Pandya also fails to disclose, teach or suggest collecting by a remotely coupled monitoring and control device an identity, a type, a capability and a reporting level for a plurality of remote devices designated for responding to monitoring and control messages relating to the operation of the head-end. Pandya does not mention a remotely coupled monitoring and control device collecting an identity, a type, a capability and a reporting level for a plurality of remote devices.

Pandya further fails to disclose, teach or suggest presenting in a graphical user interface a display of the parameters associated with transport streams for delivering the programming guide and contents to the remote set top terminals obtained from the service manager and a display of the status obtained from the session manager. Pandya

does not even mention a graphical user interface for presenting a display of monitoring and control information.

Still further, Pandya fails to disclose, teach or suggest activating an alert using the graphical user interface to generate a monitoring and control message relating to the operation of the head-end. Pandya does not mention activating an alert using the graphical user interface.

Thus, Smyth, Terreault, Jahn, Rodriguez and Pandya, alone or in combination, fail to disclose, teach or suggest the invention as defined in independent claim 37.

Dependent claims 38-47 are also patentable over the references, because they incorporate all of the limitations of the corresponding independent claim 37. Further dependent claims 38-47 recite additional novel elements and limitations. Applicant reserves the right to argue independently the patentability of these additional novel aspects. Therefore, Applicant respectfully submits that dependent claims 38-47 are patentable over the cited references.

On the basis of the above amendments and remarks, it is respectfully submitted that the claims are in immediate condition for allowance. Accordingly, reconsideration of this application and its allowance are requested.

f a telephone conference would be helpful in resolving any issues concerning this communication, please contact Attorney for Applicant, David W. Lynch, at 865-380-5976. If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to

charge payment or credit any overpayment to Deposit Account No. 13-2725 for any

additional fee required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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